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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/105,844	06/26/1998	USHA UPADHYAYULA	INTL-0055(P5	6060

7590 02/09/2005  
TIMOTHY N TROP  
TROP PRUNER & HU  
8554 KATY FREEWAY STE 100  
HOUSTON, TX 77024

EXAMINER
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ALAUBAIDI, HAYTHIM J

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/105,844

**Applicant(s)**

UPADHYAYULA ET AL.

**Examiner**

Haythim J. Alaubaidi

**Art Unit**

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 43-49 and 57-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 43-49 and 57-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This communication is a Non-Final Office Action following an RCE amendment filed on December 27, 2004.
2. Claims 43-49 and 57-68 are currently presented for examination following the RCE amendment.
3. The Examiner acknowledges the cancellation of Claims 50-56; and the newly added Claims 61-68.
4. Claims 43, 57 and 61 are independent claims.
5. Claim 68, is rejected under 35 U.S.C. 112, first paragraph.
6. Claims 44, 45 and 59 are rejected under 35 U.S.C. 112, second paragraph.
7. Claims 43-49 and 57-68, are rejected under 35 U.S.C. 103(a).

***Continued Examination Under 37 CFR 1.114***

8. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 27, 2004 has been entered.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claim 68, is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "condition of an image sensor", specifically the "sensor" was not described in the Specification. The Examiner is refereeing to Page 20, Lines 1-20 of the current Specification in regard to the lighting conditions.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 44, 45 and 59 are rejected under 35 U.S.C. 112, second paragraph, for insufficient antecedent basis of a limitation in the claim.

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a. Claims 44 and 45 recites the limitation "the associated profile information".

There is insufficient antecedent basis for this limitation in the claim.

b. Claim 59 recites the limitation "the associated image file". There is

insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 43-49 and 57-60, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirowo Inoue (U.S. Patent No. 6,273,535 and Inoue hereinafter) in view of Gary Starkweather (U.S. Patent No. 5,694,227 and Starkweather hereinafter) and further in view of Yoshiki Ishii (U.S. Patent No. 6,477,318 and Ishii hereinafter).

Regarding Claims 43, 49 and 57-58, Inoue discloses:

capturing an image in a digital imaging device (Inoue , Figure 1; see also Col 3, Lines 67 though Col 4, Line 1) to form a graphical object (Inoue, Col 2, Lines 5-18, i.e. image forming)

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forming an image file including the graphical object and said device profile (Col 4, Lines 6-11), i.e.

The digital camera 1 **stores** (associate)<sup>1</sup> **input-device-unique information unique to the device** (device profile) in a status memory 4. Also, the digital camera 1 photoelectrically converts an image into an electrical signal using a CCD and the like, **and holds a plurality of images as digital image data in an image memory 5** (image data, also the same as graphical object).

see also (Col 4, Lines 11-19), i.e.

At the same time, the digital camera 1 stores the input states of the individual images (image data) held in the image memory 5 and **parameters of color processing** (device profile)<sup>2</sup> and the like executed in the digital camera in an image additional information memory 6 as image additional information 11. Such information is stored in a RAM or a nonvolatile RAM, or a magnetic storage medium or magneto-optical recording medium.

transferring said graphical object and associated device profile from said imaging device (Inoue, Col 4, Lines 35-40).

Inoue reference discloses all of the claimed subject matter set forth above, except it does not explicitly indicate the step of developing a device profile based at least on the conditions of image capture; nor does it disclose the dynamic generation of the profile .

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<sup>1</sup> The Examiner is interpreting the "stores" feature in the Inoue reference as "associating" according to the Specification of the current Application (please see Disclosure, Page 4, Line 28).

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However Starkweather teaches developing a device profile based at least on the conditions of image capture<sup>3</sup> (Col 2, Lines 19-21);

Given the intended broad application of Inoue system, it would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Inoue with the teachings of Starkweather to include developing a device profile based at least on the conditions of image capture. As in developing the device profile, Inoue reference suggest in a way, the consideration of "image condition" (Abstract, see also Col 5, Lines 18-20, i.e. ***color processing parameter 13-15 in the camera, as image sensing conditions***) yet the developing of a device profile was not based on the condition of the image capture, but instead was based on forming images (Col 20, Lines 43-45), hence one ordinary skill in the art would be motivated to combine the references in order to increase the flexibility of a device by maximizing the usage and increasing the compatibility of the device with other systems, such as other output devices.

The combination of both Inoue and Starkweather discloses all of the claimed subject matter set forth above, except it does not explicitly indicate the step of dynamically generating a profile. However Ishii discloses dynamically generating a profile (Abstract, i.e. dynamic image data; see also Col 1, Lines 11-16, i.e. an image recording device and method capable of optimum conversion processing of dynamic

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<sup>2</sup> The Examiner would like to note that the "parameters of color processing" can also be interpreted to be like the device profile, considering Applicant's Specification of the current Application (please see Page 1, Lines 13-16).

<sup>3</sup> Please note that Inoue does disclose the feature of having different lighting conditions for capturing an image (Col 20, Lines 55-61).

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picture image data from an input device having variable characteristics, and to a computer-readable memory; see also Col 2, Lines 13-16, i.e. carrying out color management processing in the recording of dynamic image data to a medium; see also Col 3, Lines 38-40, i.e. As an example of color space characteristic data may be adduced profile data representing a conversion characteristic to a different color space).

Given the intended broad application of the combination of both Inoue and Starkweather, it would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of both Inoue and Starkweather with the teachings of Ishii to dynamically generate a device profile especially when using an input device that can generate dynamic image data such as a "video camera" (Ishii, Col 1, Lines 18-36, i.e. video camera; see also automatically; see also Col 4, Lines 6-18); one good reason would be to continuously (dynamically) view an output of the inputted image data on an output device such as, a display screen; also due to the high portability of video cameras the conditions of the image capture, such as the lighting conditions, i.e. indoor or outdoor that may change rapidly and to view the output of this video camera with a continuous clear display

Regarding Claims 44 and 59, Ishii discloses:

storing portion of the associated profile information in a profile file (Col 8, Lines 4-24);

associating a file name with the profile (Figure 7 and corresponding text); and communicating the filename to the CMS (Col 8, Lines 4-24).



Regarding Claims 45 and 60, Starkweather discloses storing a value representative of a color relation between an input color space and a profile color space (Col 7, Lines 38-42).

Regarding Claims 46-47, Starkweather discloses illuminant tag value and white point tag value (Col 7, Lines 22-57; specifically Lines 2-31; see also Col 6, Lines 11-18).

Regarding Claims 48, Starkweather discloses red, green and blue colorant tag values (Col 2, Lines 24-28).

15. Claims 61-66 and 68, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirowo Inoue (U.S. Patent No. 6,273,535 and Inoue hereinafter) in view of Gary Starkweather (U.S. Patent No. 5,694,227 and Starkweather hereinafter).

Regarding Claims 61-63, Inoue discloses:

receiving a file having image data and device profile information from an imaging device (Col 4, Lines 6-11), i.e.

The digital camera 1 **stores** (associate)<sup>4</sup> **input-device-unique information unique to the device** (device profile) in a status memory 4. Also, the digital camera 1 photoelectrically converts an image into an electrical signal using a CCD and

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<sup>4</sup> The Examiner is interpreting the "stores" feature in the Inoue reference as "associating" according to the Specification of the current Application (please see Disclosure, Page 4, Line 28).

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the like, **and holds a plurality of images as digital image data in an image memory 5** (image data, also the same as graphical object).

see also (Col 4, Lines 11-19), i.e.

At the same time, the digital camera 1 stores the input states of the individual images (image data) held in the image memory 5 and **parameters of color processing** (device profile)<sup>5</sup> and the like executed in the digital camera in an image additional information memory 6 as image additional information 11. Such information is stored in a RAM or a nonvolatile RAM, or a magnetic storage medium or magneto-optical recording medium.

Inoue reference discloses all of the claimed subject matter set forth above, except it does not explicitly indicate the step of comparing at least a portion of the device profile information to at least a portion of prior received device profile information.

However Starkweather discloses comparing at least a portion of the device profile information to at least a portion of prior received device profile information (Starkweather, Col 2, 36-42 and Lines 59-65) i.e. *The output device includes an output device profile that is updated in response to the modified device profile.*

Given the intended broad application of Inoue system, it would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of Inoue with the teachings of Starkweather to compare a new device profile to the previous device profile in order to replace the previous device

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profile when the surrounding lighting conditions has been changed and also to produce a better image reproduction that is as close as it is possible to the original image.

Regarding Claim 64, Starkweather discloses illuminant tag value (Starkweather, Col 2, Lines 52-55; se also Col 3, Lines 18-22).

Regarding Claim 65, Starkweather discloses media white (Col 3, Lines 9-17).

Regarding Claim 66, Inoue, discloses viewing conditions (Col 8, Lines 22-29, i.e. monochrome character mode, contrast).

Regarding Claim 68, Starkweather discloses wherein the device profile information relates to a condition of an image during capture of an image (Col 2, Lines 19-42).

16. Claims 67, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirowo Inoue (U.S. Patent No. 6,273,535 and Inoue hereinafter) in view of Gary Starkweather (U.S. Patent No. 5,694,227 and Starkweather hereinafter) and further in view of Yoshiki Ishii (U.S. Patent No. 6,477,318 and Ishii hereinafter).

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<sup>5</sup> The Examiner would like to note that the "parameters of color processing" can also be interpreted to be like the device profile, considering Applicant's Specification of the current Application (please see Page 1, Lines 13-16).

Regarding Claim 67, the combination of both Inoue and Starkweather discloses all the claim limitations of the independent claim, except that nor Inoue or Starkweather explicitly indicate that if the comparison is indicative of no match between the device profile information and the prior received device profile information, generating a profile based on the device profile. However, Ishii teaches that if the comparison is indicative of no match between the device profile information and the prior received device profile information, generating a profile based on the device profile (Col 8, Lines 10-24).

Given the intended broad application of both Inoue's system and Starkweather, it would have been obvious to a person of ordinary skill in the art at the time of Applicant's invention to modify the teachings of both Inoue and Starkweather with the teachings of Ishii by indicating in what situation the update to the device profile is occurring (if no match found), as Starkweather only indicates an update to the device profile; one reason would be dynamically (real time) generate new device profiles when new lighting conditions appears (changes in the color) (Ishii, Col 8, Lines 21-24).

identifying the profile to the color management system (CMS) (Ishii, Figure 17, and corresponding text, i.e. Elements No. 214 and 215);

storing the generated profile (Ishii, Figure No. 1, Element No. 107 and corresponding text; see also Col 8, Lines 4-10).

***Points of Contact***

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haythim J. Alaubaidi whose telephone number is (571) 272-4014. The examiner can normally be reached on Monday - Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (571) 272-4023.

Any response to this office action should be mailed to:

The Commissioner of Patents and Trademarks, Washington, D.C. 20231 or telefax at our fax number (703) 872-9306.

Hand-delivered responses should be brought to the Customer Service Window of the Randolph Building at 401 Dulany Street, Alexandria, VA 22314

*Haythim J. Alaubaidi*

  
**FRANTZ COBY**  
**PRIMARY EXAMINER**

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Patent Examiner  
Technology Center 2100  
Art Unit 2161